



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/686,988

10/15/2003

Noshir C. Wadia

SVL920030095US1

7441

45112

7590

08/06/2008

Kunzler & McKenzie
8 EAST BROADWAY
SUITE 600
SALT LAKE CITY, UT 84111

EXAMINER

CHANG, JUNGWON

ART UNIT

PAPER NUMBER

2154

MAIL DATE

DELIVERY MODE

08/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/686,988 | Applicant(s) WADIA ET AL. | |
| | Examiner JUNGWON CHANG | Art Unit 2154 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 11-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 11-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/15/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's election of claims 1-7 and 11-24 without traverse. Claims 8-10 have been canceled.

2. Claims 1-7 and 11-24 are presented for examination.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 and 11-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart et al, (US 2003/0208284), hereinafter Stewart, in view of Dar et al, (US 2004/0205120), hereinafter Dar.

5. As to claims 1, 11 and 18, Stewart discloses a method for autonomic identification of an optimum hardware configuration for a Web infrastructure, said method comprising the steps of:

(a) establishing a plurality of performance objectives and a plurality of best practice rules for said Web infrastructure (page 1, 0004, "workload and topology parameters of a computer system configuration to vary the number of servers...");

(b) establishing a *search* and a current configuration performance index within said *search* (page 5, 0041, “optimization module 200 may retrieve the objective corresponding to the current parameter set”);

(c) searching a database of available hardware models for finding a best-fit configuration based on said established plurality of best practice rules and said established current configuration performance index (page 2, 0021, “a characteristic that can be varied in the configuration during the optimization, including the number of items at each level...”; page 3, 0026, “evaluating hardware models”; page 4, 0032-0033);

(d) calculating performance data of said found best-fit configuration using a performance simulator (104, fig. 1; page 2, 0019, “performance simulator 104 for each simulation of the optimization”; page 5, 0045-0046);

(e) comparing said calculated performance data to said established plurality of performance objectives (250, fig. 2; page 5, 0041, “simulating of matching configurations and parameter sets”; page 6, 0054); and

(f) if said calculated performance data meet said established plurality of performance objectives, designating said best-fit configuration as said optimum hardware configuration (page 6, 0064, “is regarded as the best configuration”); otherwise, repeating steps (b) thru (f) until said *search* is exhausted (fig. 3; page 6, 0065).

6. Although Stewart discloses a plurality of search algorithm to find a best fit

Art Unit: 2154

configuration (page 6, 0054-0062; 0063-0064, "this algorithm performs...the best configuration"), Stewart does not specifically use a term "space search". Dar discloses space search (page 4, 0033, "search space"; page 5, 0040; page 7, 0073). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Stewart and Dar because Dar's teaching would provide fast searching time by eliminating some solutions from consideration, as taught by Dar (page 5, 0040).

7. As to claims 2, 12 and 19, Stewart discloses wherein said plurality of performance objectives comprises system throughput objective, response time objective, resource utilization objective, and number of concurrent users objective (page 1, 0004, "number of servers and users, CPU speed, the amount of memory..."; page 2, 0020, "numbers of users connecting to the servers, the communications bandwidth...").

8. As to claims 3, 13 and 20, Dar discloses, wherein said plurality of best practice rules comprises SMP Size Rules, and Vertical vs. Horizontal Solution Rules (page 2, 0021; page 4, 0033).

9. As to claims 4, 14 and 21, they are rejected for the same reasons set forth in claims 1, 11 and 18 above. In addition, Dar discloses, wherein said search comprises a lower limit and an upper limit for performance index of said optimum hardware configuration (page 2, 0022, "optimization function generally represents a maximum or a

minimum for a parameter”).

10. As to claims 5, 15 and 22, Dar discloses, wherein said database of available hardware models comprises a plurality of hardware brands, a plurality of hardware models within each said plurality of hardware brands, and a relative performance index for each of said plurality of hardware models (page 3, 0026, “hardware models”; page 4, 0032, “hardware models used to model the CPUs of the various servers”).

11. As to claims 6, 16 and 23, Dar discloses, wherein said best-fit configuration conforms to said established plurality of best practice rules and has a performance index within a delta range of said established current configuration performance index (page 4, 0033, “between 1 and 5”).

12. As to claims 7, 17 and 24, Dar discloses, wherein said current configuration performance index is established by taking the average of said lower limit and said upper limit of said search (page 4, 0035, “problem manager 212 to determine the number of parameters and the number of possible values for each parameter”; page 5, 0038).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Art Unit: 2154

Mc Bride, US 2003/0229695, Moran et al, US 6,801,940, Hardwick et al, US 2007/0005330, Szentesi et al, US 7,366,108, Bergman et al, US 6,408,300, Schran et al, US 2002/0138443 disclose method and system for determining network configuration settings that provide optimal network performance.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNGWON CHANG whose telephone number is (571)272-3960. The examiner can normally be reached on M-F 6:30 - 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUNGWON CHANG/
Primary Examiner, Art Unit 2154
July 31, 2008